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The Free State Veterinary Service.

The following letter appeared under the above heading in the issue of *The Irish Times* dated 1st February, 1928:

To the Editor of "The Irish Times."

Sir,—I wish to draw attention to the conditions of what I may term "The State Veterinary Service," or "Civil Veterinary Service." The members of the profession who form this service are those whole-time officers who have been appointed under the Diseases of Animals Acts by the Department of Agriculture as Veterinary Inspectors. From time to time reasonable (not to mention adequate) remuneration for invaluable services has been denied these men, and their conditions of service compare very unfavourably with those of clerical and other civil servants, although their services are of paramount importance, dealing with the prevention and control of contagious and infectious diseases of animals.

These duties entail the handling and critical examination of every animal intended for exportation and importation. This work is of a most arduous, dangerous and exacting nature, and requires superior technical knowledge and experience, and often has to be performed under most trying conditions for hours on end. The Minister for Agriculture received a deputation of the National Veterinary Medical Association in March, 1927. This deputation made representations on behalf of the veterinary inspectors of the Department to have their grievances redressed. The demands made are admittedly reasonable and just, but they have been turned down by the well-paid clerical officials.

It is only natural to expect that the Veterinary Service should be encouraged and placed in a position from which the best advantage might accrue to the State. The profession too long has suffered the indignity of negation and of subserviency to other State interests. Its importance and usefulness to the State appear to be outside official conception. The time has come for plain speaking, and a better understanding, and it is surely "up to" the Minister (Mr. Hogan), who is doing such good work for the success of agriculture in general, and has accepted the claims of the veterinary inspectors as just, to see that any indifference by the higher clerical officials does not endanger the State by alienating the service, which is at the present time without doubt of the greatest economic importance to the country.

Could such a lamentable state of affairs exist in any other public service? The service is not pressing its claims on the Government because of the imminence of foot-and-mouth disease so rampant across Channel, but because it feels that it is being treated with gross injustice in regard to remuneration and conditions of service. It has cost the British Government over five millions to try to eradicate this most contagious disease from England. Just pause and consider what might occur if these already disappointed veterinary inspectors withdrew their services, and this formidable, or other similar, disease should visit this country.

Under these circumstances it behoves the profession to become thoroughly organised, and to enlist the best men of every political party to expose the justice of their claims in the Dail. No sacrifice must be too great if the profession is ever to hold that place in the world of science and industry which its merits demand that it should occupy.—Yours, etc., "Lancet."

Dublin,

31*st January*, 1928.

The Weinberg Casting Apparatus.

At a meeting of the *Schechita* Board, held on 1st February, Mr. J. M. Lissack (President) made a statement in regard to the recent test of the Weinberg Casting Machine, in the course of which he said that a Committee of distinguished experts was appointed as "The Weinberg Pen Testing Committee" to witness the test and report on the value of the apparatus for practical purposes. This Committee was composed of the following gentlemen:—

Professor F. T. G. Hobday, F.R.C.V.S., Chairman; Mr. Whittingham, C.C. (Chairman of the Cattle Markets Committee); Mr. R. O. Paddison (Honorary Slaughtering Adviser to the R.S.P.C.A.); Miss Violet Wood (Council of Justice to Animals); Dr. Samuel Daiches (Board of Deputies of British Jews); Dr. Lovatt Evans (Physiologist, University College); Mr. Leuw, C.C. (Carcase Butchers' Association); Mr. L. A. Legros, O.B.E., M.I.Mech.E. (Consulting Engineer to the Board of *Shechita*); Mr. B. Salmon (National Union of Distributive and Allied Workers); Major-General Sir John Moore (Royal College of Veterinary Surgeons); Mr. A. Gofton (Chief Veterinary Inspector, Edinburgh); Mr. A. M. Trotter (Chief Veterinary Inspector, Glasgow); Major J. A. Dixon (Chief Veterinary Inspector, Leeds); Major W. J. B. DeVine (Chief Veterinary Inspector, Birmingham); Capt. H. L. Torrance (Veterinary Inspector, Birkenhead); Capt. W. K. Johnstone (Veterinary Inspector, Manchester); Mr. T. D. Young, O.B.E. (Central Markets, E.C.); Mr. A. C. Lloyd (Metropolitan Cattle Market, N.); Mr. J. R. Hayhurst (Superintendent and Chief Veterinary Inspector, Metropolitan Cattle Market); Capt. Hume (University of London Animal Welfare Society), Hon. Secretary.

Immediately after the test, the Committee unanimously came to the following decisions:—

1. Proposed by Professor Gofton, F.R.C.V.S.
   Seconded by Mr. Johnstone, F.R.C.V.S.

That the machine in its present condition leaves considerable room for improvement, and that further consideration be deferred.

2. Proposed by Major DeVine, M.C., F.R.C.V.S., D.V.S.M.
   Seconded by Major Dixon, M.R.C.V.S., T.D.

That we do not continue the present trial with the machine in its present condition.

3. Proposed by Mr. Legros, A.M.I.C.E.
   Seconded by Major DeVine, M.C., F.R.C.V.S., D.V.S.M.

That the designs of any improved machine be submitted to a Technical Committee, consisting of: An Engineer,

a Veterinary Superintendent (or Inspector), a *Shochet*, a Carcase Butcher, a Slaughterman (N.U.D.A.W.), to form a report to submit to the Committee before being called upon.

They were prepared for a test of about 200 animals, continued the Chairman, and agreed to pay the very heavy expense which that would have entailed. As it was, the mere beginnings had cost the Board £446. The unanimous conclusions of the Committee bore out the report of a scientific examination of the machine which they had received from Germany.

Immediately the decision of the Committee of experts had been made known, there had appeared a public statement by the inventor's solicitor, which, directly or indirectly, laid the blame for the failure of the apparatus on the broad shoulders of that long-suffering Board. He, therefore, thought it only right to inform them that the authority for the supply of the electrical winch required by the inventor had been given in writing by Dr. Lucas as their representative, as far back as the 10th November, and that, so far as that Board was concerned, nothing should have stood in the way of the winch or any other requirement of the inventor being installed long before the date of the test. In that connection, he referred to the Report on the Test by the Board's mechanical expert, Mr. L. A. Legros, in which he mentioned the assistance which had been afforded for facilitating an adequate and fair test of the machine.

In conclusion, the President said that the Executive Committee would continue to give its attention to any machine which, on a practical test, would prove to be superior to the present mode of casting. They had at the present time another casting apparatus under consideration, and he would not fail to let them know the results of any examination of that machine if it should prove acceptable from the practical point of view.—*Jewish Chronicle.*

Territorial Army Reduction.

Mobile Veterinary Sections Disbanded.

The decision, foreshadowed in *The Times* on January 13th, to abolish the mobile veterinary sections of the Territorial Army with a view to economy, was officially announced last week. An Army Order states that this decision, taking effect forthwith, will involve the disbandment of the following divisional mobile veterinary sections:

42nd (East Lancs.), 43rd (Wessex), 44th (Home Coys.), 46th (N. Midland), 47th (2nd London), 48th (S. Midland), 49th (W. Riding), 50th (Northumb.), 51st (Highland), 52nd (Lowland), 53rd (Welsh), 54th (E. Anglian), 55th (W. Lancs.), and 56th (1st London).

Last year two veterinary evacuating stations and two veterinary hospitals were abolished, leaving the mobile veterinary sections, now to be disbanded, as the sole surviving units of the Royal Army Veterinary Corps in the Territorial Army. The number of horses in use in the Army has been greatly reduced by the increasing mechanisation of artillery brigades.—*The Times.*

At Glasgow Corporation Health Committee, further consideration was given to the proposal that the Corporation should make representation to the Secretary of State to take the necessary steps, by regulations or otherwise, to confer authority on Veterinary Inspectors to destroy all carcases, any portion of which is affected by tuberculosis. The vote being equal, the Chairman gave his casting vote against the proposal.

The Methods of Treating Human Cervicitis in their Applicability to Veterinary Medicine.*

By Dr. G. L. Moench,
Assistant Professor of Gynæcology, New York Post-Graduate Medical School and Hospital.

Inflammations of the cervix uteri offer problems of therapy not only to the gynæcologist but likewise to the veterinarian. In part, the lack of unanimity regarding the treatment of cervicitis is due to an utter lack of regard for the protean aspects of the underlying pathology of this region. A further abetting factor is to be found in the confusing terminology employed; erosion, pseudo-erosion, ectropion, etc., being very often used without any real understanding of what these terms should signify.

This is not the time or place to give a detailed description of the embryology and pathology of this region, but a few brief remarks may, nevertheless, not be amiss, so as to make clear the meaning of the various terms as used here.

Let us understand first of all that between the columnar epithelium of the cervical canal and the squamous epithelium of the vagina there exists apparently an ontogenetic in-balance at the external os. This may result in squamous cell epithelium growing into the cervical canal even in the adult or, contrarily, the columnar epithelium of the cervical canal may grow too far out on to the portio and cause a red, mucous-secreting area around the external os, that is, a congenital pseudo-erosion. These cases are not important clinically and the normal relations between the two types of epithelium are later re-established.

Due to inflammatory cervical discharges, the squamous cell epithelium surrounding the external os may become desquamated, forming a true erosion (erosio granulans). Such a lesion shows an actual loss of the covering epithelium. The body forces, however, attempt to heal this defect as quickly as possible. As a result we have at first columnar epithelium (as more resistant to maceration) covering the erosion (first stage of healing) and later, squamous cell epithelium replaces this as the erosion tends to heal. This squamous epithelium at first is only a superficial covering and either becomes lost again or, if conditions are suitable, tends to actual healing. True cervical erosions are nearly always due to cervicitis. Therefore, to treat the erosion alone is to treat only a symptom. Unless the cervicitis is really cured, an erosion even when apparently cured (covered with squamous cell epithelium), will tend to recur. This explains why erosions which seem cured clinically often return in a month or two.

Glandular erosions, papillary erosions, cystic erosions, etc., are all part and parcel of the same process and not separate entities. Cysts of the cervix, so-called Nabothian follicles, may be due to closed cervical gland ducts or to traumatically displaced bits of mucous membrane.

The histologic changes in cervicitis, with the exception of certain specific diseases such as tuberculosis, anthrax, etc., are all the same. The inflammatory conditions of the cervix must be separated from the purely congested lesions where only excess mucus, but no pus, is present. It is self-evident that in the congested lesions the cause for the

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* Reprinted from the *Cornell Veterinarian*, October, 1927.

congestion must be sought and removed, so that these cases will not be further considered here.

True inflammations of the cervix are either acute or chronic. The acute form is of less importance than the chronic, as it either heals quickly or becomes chronic. It is to be remembered that the bacteria in cases of cervicitis are superficially situated in the mucous membrane and do not penetrate into the glands. At the same time, the whole cervical tissue shows an inflammatory re-action in response to the bacterial invasion of the endocervix, so that the term " cervicitis " is more appropriate than the commonly employed one " endo-cervicitis."

Ectropion has nothing to do with erosion although often used in reference to it. Ectropion means eversion ; it is either inflammatory or traumatic. The acute (inflammatory) form is caused by a bulging out of the cervical mucous membrane due to hyperæmia and œdema. The traumatic ectropion, on the other hand, is the result of lacerations of the cervix and the pulling apart of the cervical lips by the scar tissue.

Having thus defined the terminology, let us consider the cases of true cervical inflammation, or cervicitis. Such lesions, whether acute or chronic, show the signs of inflammation and practically always a purulent discharge. Let us leave out of consideration here those inflammatory lesions of the cervix which are due to neoplasms, fistulæ, tuberculosis, parasites, etc., as offering no problems for discussion once the diagnosis is made, and limit ourselves to those, especially chronic, cases where the cervicitis represents the main pathology.

Such cases may be acute infections received from the male, or the aftermath of such infections ; others may be and are due to infections with pyogenic organisms following abortion, partus, or lacerations of the cervix from any cause, or even hæmatogenous infections from some other focus in the body, or spontaneous or heteroinfections. In addition, local manipulations may cause traumatic, chemical, or thermal injuries and so lead to infection. That a cervicitis may be accompanied by an erosion of cystic, papillary or even polypoid type, or by an octropion, stands to reason. With such a varied pathology as has been briefly outlined here, it then becomes evident that no one method of treatment can be of benefit in all cases.

Treatment, to be successful, must vary with the pathology present in each individual case, and often a combination of various methods of treatment will be necessary to achieve results.

All the various methods of treatment of cervicitis devised are based upon one or more of the following principles :—

1. Attempts at disinfection by :—
   (*a*) douches with phenol, silver nitrate, potassium permanganate, lysol, etc. ;
   (*b*) introduction of yeast and similar preparations ;
   (*c*) special forms of treatment, such as boric acid solutions in cases of sprue, vaccine or serum treatment or the destruction of bacteria by heat or artificial fever.
2. Removal of irritation due to :—
   (*a*) uncleanliness ;
   (*b*) foreign bodies ;
   (*c*) fistulæ.
3. Prevention of re-infection by :—
   (*a*) avoidance of dirty instruments, and local manipulations by unqualified untrained attendants ;
   (*b*) clearing up of infection in the male.
4. Lessening of irritation from discharges by :—
   (*a*) bland douches ;
   (*b*) coagulation of secretion with tannic acid, aluminium acetate, etc. ;
   (*c*) drying.
5. Destruction or removal of the infected area by :—
   (*a*) surgery ;
   (*b*) cautery, including electrocoagulation, and electric knife ;
   (*c*) radium.
6. Stimulation of repair of tissue by :—
   (*a*) heat ;
   (*b*) massage ;
   (*c*) tampons ;
   (*d*) passive hyperæmia.

Of these six purposes of the various forms of cervicitis therapy, two and three are axiomatic and need no further discussion. The others can be classified under one of the following headings :—

Methods of Treatment :—

1. Chemical treatment.
2. Mechanical or symptomatic treatment.
3. Biological treatment.
4. Special forms of treatment.
5. Surgery.
6. Cautery.
7. Radium.
8. Hyperæmia treatment.

Each one of these methods has certain disadvantages and advantages, which I will point out, and at the same time attempt to show which form of treatment is best suited to a certain type of cervical lesion. In veterinary medicine conditions are necessarily different than in gynæcology, and external reasons may prevent an otherwise very good method of treatment from being practical. The fact that, except in small animal practice, the doctor must always go to his patient, will more or less prevent any method which requires cumbersome apparatus being looked upon with much favour. The expense needed to acquire the necessary apparatus is also an important point. For this reason, for instance, I believe we can dismiss radium from further consideration. As a consolation, however, I want to add that we have tried radium on a fair number of cases at the New York Post-graduate Medical School and Hospital without seeing any benefits from such treatment. Diathermy, which requires both expensive and cumbersome apparatus, can also be dismissed with this brief mention. Furthermore, diathermy —except electrocoagulation itself—is not of great value for cases of cervicitis, and the results of electrocoagulation can be duplicated by the cautery, although the electrode can perhaps be controlled a little more nicely than a cautery point in which the heat cannot be turned on and off on the second, as the point always stays hot for some time. Whether or not vaccines and sera are of any value in veterinary medicine I must leave to others to decide. In gynæcological practice they have always disappointed me. The same can be said of the biological methods.

While the introduction of yeast or lactic acid bacilli often gives splendid temporary results, the underlying etiology of the inflammation remains and upon ceasing treatment the old trouble always returns, at least as far as my experience goes.

As possibly available for veterinary medicine we have, then, the chemical and mechanical treatment of cervicitis; surgery and cautery; and lastly, passive hyperæmia, and I will take these up briefly in that order.

Chemical and Mechanical Treatment. Douches, in themselves, be they boric acid, potassium permanganate, bichloride of mercury, or other more or less similar substances, are in most instances of no avail in chronic cervicitis, as they only wash off the surface secretion. Topical applications, iodine, Churchill's tincture, ichthyol, silver nitrate, etc., are generally not much better and of use, if at all, only in the mildest cases because of the lack of penetration. Where topical applications are to be used, however, the cervical mucus must first be removed so that the applied medication may really come in contact with the cervical walls and not simply be applied to the mucus in the canal. As it is frequently difficult to wipe out the cervical mucus I have used a small tube connected to an electric pump or any fair-sized syringe, to suck out the mucus. In this way it is not difficult to clear the cervical canal and prepare it for topical applications. Of course this method only removes the free mucus in the canal and does not affect the mucus in the cervical glands. The procedure is, therefore, not comparable to the passive hyperæmia therapy. As for other forms of treatment, such as bismuth paste injections, or the use of strong phenol, or zinc chloride solution, or pure potassium hydroxide, I have not had much luck with them, and furthermore, the use of strong caustics is not without danger in the cervical canal; their action is hard to control and, causing necrosis and inflammation, they may easily produce synechiæ, especially in animals with prominent cervical folds.

Nevertheless, douches and topical applications are of value as an adjunct to other forms of treatment. Douching removes some of the infected material, prevents accumulation and decomposition of the secretions in the vaginal folds, so preventing maceration and lessening irritation. The same is true, of course, of coagulation of the secretion by astringents or by drying. In addition, bland hot douches stimulate repair by inducing hyperæmia. Furthermore, chemical and mechanical treatment is, to my mind, the only allowable form of treatment in acute cervicitis and the local application of 25 per cent. argyrol to the cervical canal (preferably on a small tampon pushed into the cervical canal) is often of great benefit. In severe cases I have used powdered argyrol cyrstals applied on gauze in the cervical canal, and a flattened tampon dusted with argyrol over the cervix. If, however, complications—especially if accompanied by fever—occur, all local treatment must be stopped.

Surgical Treatment.—There are certain forms of cervicitis, such as the markedly hypertrophic or cystic cervix, or especially the inflamed lacerated cervix with ectropion, where surgery is probably the best or even the only form of treatment. Surgery if used must, however, be adequate. The curette as a rule is useless. The preferred procedure in a woman would be some form of operation which removes most of the inflamed tissue and at the same time leaves as much of the cervix as possible. Amputations of the cervix are avoided as much as possible, at least during the child-bearing period, because they cause loss of the sphincter action of the cervix, and so conduce to abortions. In the four-footed animals, since the pressure of the gestational products is not on the cervix, those objections do not hold good. As a result, the type of cervix under discussion is probably best treated by amputation, for in the end a high cervical amputation is the only way in which the whole inflamed area can be removed. Nevertheless, surgery has the drawback that one operates in an inflamed area and secondary infection and hæmorrhages may and do occur.

Cautery.—The cautery treatment of cervicitis consists either in making linear or punctate incisions with a fine cautery, or using a heavy cautery to actually destroy the inflamed endocervix. The first method stimulates growth by local hyperæmia; the second, accompanied by extensive and deep destruction of tissue, is open to about the same objections as surgery. At the same time, if other forms of treatment fail and surgery is impractical, or seems unnecessary because no laceration or ectropion is present, cautery may well be used. It certainly has one great advantage over other methods of therapy in that it probably takes less time than any other form of treatment. Its dangers are subsequent hæmorrhage from sloughing later on, and possible scar-tissue shrinking, resulting in cervical stenosis.

The type of cautery used depends a good deal on the individual preference of the operator. Where electricity is available the Post cautery is a handy instrument, as it can be carried in the pocket if need be, and can be connected directly to any light socket. It could easily be modified to suit the need of the particular veterinarian. If electricity is not within reach an ordinary Pacquolin cautery or even soldering irons in various sizes will serve very well.

Hyperæmia Treatment.—While medicated tampons or heat in the form of hot douches, hot pads on the abdomen, etc., cause hyperæmia, such action is usually insufficient to do more than aid the other lines of treatment of the cervicitis.

Some years ago, as I was not satisfied with the results obtained with the usual methods of treating cervical inflammation, I started to employ passive hyperæmia in the form of negative pressure produced by suction; this treatment was used for the chronically inflamed cervix with much discharge and more or less erosion. Since that time this mode of therapy has given gratifying results with such cervices as were not acutely inflamed, severely lacerated, or cystic. Those cervices which presented only a few small cysts were, however, also treated with hyperæmia after these small cysts had been punctured with a fine cautery. As an aid to the suction treatment, I used 25 per cent. argyrol solution, which I found by repeated trials to give the best results. In selected cases I have found the described passive hyperæmia better than the other methods of treatment. It is known that passive œdema kills bacteria, stimulates fibrous tissue, lessens pain by reducing inflammation that is irritating nerve

endings, and dissolves pathological products. That is, all the necessary requirements of treatment are furnished by the passive hyperæmia.

For my work I used a glass tube about 8 inches long and up to 1 inch in diameter. The nozzle of the tube was connected by rubber tubing (two pieces with a stopcock between them) to an electric negative pressure pump, or to a big syringe (250 c.c. Bigelow bladder syringe). I found that about 15 inches of negative pressure was most desirable. The method of treatment was as follows: The tube was applied through a bivalve speculum over the cervix; the largest size that would pass being used. The air was now exhausted and the tube left on for about three minutes. After three minutes the tube was removed and the pus and the mucus wiped away. This was usually very easy after the hyperæmia treatment. After the cervix was cleansed the suction tube was re-applied and then, while in place, about one dram of 25 per cent. argyrol solution was allowed to flow in through the funnel blown on to the side of the tube without, however, letting in any air. The small loss of vacuum was made up by additional negative pressure. The tube was left on again for three minutes and tilted upward so that the argyrol covered the cervix, then with the tube tilted up the air was allowed to rush in by opening either the stopcock leading to the pump, or the one controlling the funnel. The reason for this procedure was based on the following considerations: the mucus and pus are squeezed out of the cervical glands and canal by the hyperæmic congestion and swelling of the cervix which squeezes together the gland and canal walls. If the pressure is now released air will rush back as the cervix shrinks, due to the loss of vacuum. If, however, air is not available because argyrol completely covers the cervical os, the argyrol will be sucked up. After the treatment, the cervical canal in our cases certainly showed argyrol in it.

I want to mention here an ingeniously-devised instrument which Dr. Di Palma presented at the New York Academy of Medicine two years ago. This instrument combines suction, irrigation and the application of medicated solutions; it has a small, short cup connected by rubber tubing to an electric pump; in the centre of the small glass cup, which is applied to the cervix, there is a small nozzle through which the irrigating solution or the medicating agent is run. The personal objections I have to the instrument are that passive hyperæmia cannot be produced by the instrument because the suction cup is too small, and that the instrument may not be without danger because there is no real assurance that the irrigating fluid will not run up into the uterus and tubes.

If we review the literature on the passive hyperæmia treatment of cervicitis, we find that various men have used the treatment for varying conditions—the indications for treatment with one man being considered contra-indications with another author. Personally, at the New York Post-Graduate Hospital I have not used passive hyperæmia in any acute infections of the female genital tract or in malignancy or suspected malignancy, or in pregnancy or suspected pregnancy. Cervicitis complicated by chronic peri- and parametritis at times showed a slight temporary increase of pain following the hyperæmia treatment, but invariably general improvement followed shortly thereafter. As a result, I did not consider chronic adnexal inflammation as a contra-indication.

Summary.

The treatment of cervicitis which I use has crystallised, then, along the following lines:—

1. In acute cases bland douches and 25 per cent. argyrol or even powdered argyrol crystals to the cervix, combined with as much physical rest for the patient as possible. If complications develop, stoppage of all local treatment.
2. For the usual cases of chronic cervicitis, passive hyperæmia and 25 per cent. argyrol as described and mild douches to clear away the secretion. Puncture of small cysts with cautery; occasional use of the cautery for erosions, touching them up lightly to hasten epithelialisation.
3. For the markedly lacerated, hypertropic or cystic cervix, surgery as indicated.
4. If passive hyperæmia was unsuccessful, or regular attendance on the part of the patient impossible, surgery or deep destructive cautery according to indications.

In conclusion, I can only express the hope that this rather sketchy description of the methods used to treat cervicitis in the human female may perhaps suggest to you gentlemen here to-day, some procedures worth trying out on your patients. Should even only one such procedure later turn out to be of value I shall be highly gratified and feel that I have accomplished something.

Inspection of Cork Slaughterhouses.

At a recent meeting of the Southern Committee of Public Health, Mr. T. Corcoran (Chairman) presiding, arising out of reports dealing with the inspection of slaughter-houses outside the borough of Cork, Mr. Corry said it was ridiculous that their veterinary inspector had only power to inspect the slaughter-houses outside the city and not the meat in them.

The Chalrman said that that was not so. He had power to deal with any diseased carcases that he found in slaughter-houses.

Mr. Corry said he understood the veterinary inspector had no such power.

Dr. J. Saunders, County Medical Officer of Health, said he understood that the veterinary inspector had not the power of condemning unsound carcases at the present time.

Mr. Corry: Do you think he should be given such power?

Dr. Saunders sald he thought it was absolutely necessary. The machinery at present was that before such a carcase, that which the veterinary inspector considered unsound or was suspicious about, could be condemned, a sanitary sub-officer should be called in to look after it while the medical officer of the district was summoned to condemn it.

The Chairman said that was the law.

Mr. Buckley: It is ridiculous.

Mr. Corry moved that steps be taken to get power for the veterinary inspectors to condemn unsound carcases found in slaughter-houses outside the city. It was ridiculous that they could only inspect such places and not condemn unsatisfactory meat in them.

The Chairman: Is that the law?

Dr. Saunders said he could not make an absolute statement on that point at the moment.

The Chairman said he thought unsound meat could be condemned by the veterinary inspector.

Veterinary Inspector O'Keeffe: That is not so. I have no such power under the terms of my appointment.

The Chairman: If you found a diseased carcase in any part of your district, could you not condemn it?

Veterinary Inspector O'Keeffe: If I thought it was unsound, or had a suspicion about it, I could not condemn it until I left a sub-sanitary officer in charge of it and went and brought the medical officer to see and condemn it.

Dr. Saunders said Veterinary Inspector O'Keeffe, or anyone in such a position, would be more competent to express an opinion on such a carcase than anyone would be, as such officers had a training on such matters.

Mr. Carey asked was not a carcase condemned some time ago?

Veterinary Inspector O'Keeffe said in that case he had to look for a Justice or Peace Commissioner to verify his opinion and condemn it.

The Secretary: The veterinary inspector can inspect the meat, but he cannot condemn it or destroy it without calling in the medical officer to do so.

The Chairman asked how did it become necessary for the veterinary inspector, after he condemned meat, to put a man to watch it while he summoned the medical officer?

Veterinary Inspector O'Keeffe said he thought it would be necessary to have such a watch on it.

The Chairman: I think if you warned the owner not to have it removed in the meantime that that would be sufficient.

Dr. Saunders said at present he was engaged investigating a case in which some carcases of beef were shipped from Cork to Smithfield Market, and which were seized at Smithfield owing to being suspected of being tuberculous. The case had been referred to him by the Department.

The Chairman said he thought very little Cork beef was going to Smithfield at the present time.

The Secretary of the County Council said the carcases to which Dr. Saunders referred were slaughtered in the rural area, and were then brought into the city and shipped.

Dr. Saunders said that was so. The carcases were inspected at Smithfield and seized and condemned as containing tuberculosis. He had notified the officials in the rural areas near Cork to get a list of all slaughter-houses, and he intended to go fully into the matter at a meeting of the County Board. He added that he considered the veterinary inspector of each area should have power to inspect and condemn all unsound carcases that came under his notice. The veterinary inspectors were the most competent people to deal with such matters.

The Chairman said he thought no dead meat that had not a good character should be shipped out of Cork. If it was tuberculous or unsound it did a lot of injury to a great trade and interest, and would do untold injury to the country in general.

Mr. Buckley: Would not the city officials when the meat in question reached the city have inspected it before it was shipped?

Dr. Saunders: I understood every bit of meat leaving the city was inspected before shipment.

Mr. Sullivan said the best way to act in the matter was to have in their area only registered slaughter-houses. All such trouble arose by permitting private slaughter-houses to exist. Another way to deal with the matter was to have one central abattoir for the slaughter of all meat, and under circumstances where it could be inspected by a qualified official. The meat should be slaughtered at one place during limited hours, and always be subjected to the inspection of the veterinary officer in attendance.

Dr. Saunders said he had already taken full steps for dealing with the whole question at the County Board meeting.

It was then agreed to seek powers for the veterinary inspectors to condemn any unsound meat that came under their notice.—*Cork Examiner.*

Control Measures for Internal Parasites in Horses.*

By Dr. MAURICE C. HALL

(With introduction by Colonel W. Geo. Turner).

Internal parasites of domestic animals constitute a tremendous economic question to the stockmen of the United States. It is believed that such parasites are directly responsible for the loss of live stock to the value of millions of dollars annually, and this in spite of the considerable sums of money that the Government, through the Department of Agriculture, spends yearly in an effort to eradicate them.

Real progress has been made in treatment and prophylaxis of farm animals other than the equine, and much valuable data is available on the work that has been done and which is now being carried on. The infestation of farm animals, however, is so great, and the territory over which they roam so immense, that it is said that more men and more money must be made available before anything like a victory over the parasite army can be recorded, and in fact that reinforcements of both are now needed to hold the ground that has been won.

Internal parasitic invasion of sheep and hogs has long been recognised as an important economic factor and has been given much attention by both legislators and scientists. Not so with the horse and especially the colt, data on control measures for parasites in horses being extremely meagre, while we have been unable to find anything in print of a scientific character on the subject of control of internal parasites in colts. However, there is much interest in the latter subject among breeders of thoroughbreds and has been for some years, but the work has been done locally by various men using miscellaneous remedies, and little or nothing recorded or published.

It is more than possible that these insidious parasites may have a much greater influence in retarding the development, growth, and final perfection of all horses than has ever been imagined, particularly those which are bred for extreme speed and endurance, as are the thoroughbreds and the trotters. With a view to getting something worth while on the subject, arrangements have been made with the Bureau of Animal Industry, U.S. Department of Agriculture, whereby treatment of colts (weanlings, yearlings, and two-year-olds) has been instituted at the Front Royal Remount Depôt, as outlined by Dr. Maurice C. Hall, Chief of Zoological Division, who visited Front Royal and made a thorough inspection of conditions at that station. A like procedure will be inaugurated at Fort Reno and Fort Robinson remount depôts, and it is expected that some valuable data will be obtained which will be published in the *Veterinary Bulletin* as soon as available.

Treatment will be given to all of the depôt horses, including the brood mares, as manifestations may warrant, but in the case of the colts, at least until we know more of our subject, treatment will be on the basis of 100 per cent.

Dr. Hall's outline of treatment and recommendations is published herewith:—

Control Measures for Worms in Horses.—Control measures for worms in horses are based on the following facts:—

1. The most common and generally troublesome worm parasites of horses live in the digestive tract, either

*Reprinted from *U.S. Army Veterinary Corps Bulletin*, Vol. XX., No. 6.

in its lumen or more or less embedded in its mucosa. These worms produce eggs or young which pass out in the manure onto pastures, the floors of stalls, etc. So far as those worms are concerned, all infestations in horses trace back to horse manure as a source. Hence manure must be regarded as dangerous and control measures must take cognizance of manure disposal, and all possible relations of manure to horses as a source of worms.

2. It follows from the above that the concentration of manure, worm eggs and young worms is to be avoided so far as possible by : (*a*) light stocking ; (*b*) use of sloping hillside pastures from which infection will wash to some extent in rain and melting snow ; (*c*) pasture rotation ; (*d*) stock rotation (not feasible at remounts) ; (*e*) feeding from overhead racks, suitable mangers, etc., rather than from the ground ; (*f*) holding stable manure till it is well rotted before spreading it on pastures used by horses, or using it on areas not used by horses ; and (*g*) other measures as indicated by special and local conditions.

3. Carbon bisulphide in therapeutic doses cleans out bots from the stomach and duodenum, ascarids from the small intestine, and such stomach worms as are not buried in mucus or in the mucosa, and hence can be reached by the drug, but does not remove the blood-sucking strongyles, the cylicostomes or the pinworns from the large intestine.

4. Oil of chenopodium will remove many ascarids from the small intestine, the stomach worms with which it may come in contact, and the blood-sucking strongyles, cylicostomes and pinworms from the small intestine, but does not remove bots.

5. Complications determining or limiting the efficacy of treatment are :—

(*a*) Treatment for bots while the adult fly is still present or live bot eggs occur on animals will leave the animals subject to reinfestation that season.

(*b*) All worm species which have larvæ which wander through the host tissues for days or weeks before returning to the lumen of the digestive tract will require repeated treatments for control since only the worms in the lumen are affected by any drugs, while those in the tissues are out of reach of anthelmintic medication by any drugs known to us at present, so far as we have any information on this point. These wanderers include ascarids, blood-sucking strongyles, and cylicostomes. Ascarid larvæ go by the blood stream to the liver and lungs, and sometimes elsewhere, before returning to the intestine ; blood-sucking strongyles go to the anterior mesenteric artery or other vessels, where they cause aneurisms, or to the subperitoneum, or the peripancreatic tissues, or hepatic ligaments, or elsewhere ; and cylicostomes go, in some cases at least, to cysts in the intestinal mucosa. The time during which these larvæ are out of reach of drugs varies from ten days to probably months.

(*c*) Stomach worms of horses include a small trichostrongyle which causes adenoma, sometimes carcinomatous (and we are finding this worm rather commonly in Maryland and Virginia at this time), and three species of spirurids (Habronema). These spirurids are carried by house flies, stable flies and other flies which become infected, as larvæ (maggots) in manure or manure contaminated straw by eating the eggs of the worms, and then transmit these to horses by feeding on the moisture on the horses' lips or, perhaps, by biting them as in the case of stable flies.

(*d*) Female pinworms become filled with eggs and then wander out of the anus and commonly deposit eggs in the perineal region, causing pruritis as shown by the rubbing of the base of the tail.

Recommendations.

The following recommendations are to be applied as permitted by local conditions :—

A. For the removal of adult worms from the digestive tract, the treatments are as follow :—

1. Oil of chenopodium at the dose rate of 16 c.c. for adult animals weighing 1000 pounds or more. Fast the animal for 36 hours. The next morning drench carefully with one quart of raw linseed oil and follow immediately with capsule of chenopodium. The linseed oil coats the stomach, protecting it against the irritating effect of the chenopodium, dilutes the chenopodium and distributes the result of the latter drug over a wider area of mucosa, and sets up peristalsis which affects the constipating effect of the chenopodium. Prompt purgation is highly important and protective against the bad effects of anthelmintics on animals treated with them. Do not feed animal until noon. Removes some stomach worms (those reached) ; some ascarids (efficacy not definitely ascertained, but not always dependable) ; 95 to 100 per cent. of blood-sucking strongyles (worms pass for six days or more) ; approximately 100 per cent. of cylicostomes (worms pass for six to twelve days) ; and approximately 100 per cent. of pinworms (worms pass for two days).

2. Carbon bisulphide at the dose rate of 6 fluid drams for a 1,000-pound adult horse, or larger. Fast for 18 hours. Do not give a purgative, as the drug is purgative and additional purgatives may cause superpurgation ; linseed oil especially contra-indicated as it diminishes the effectiveness of the drug against bots. Removes 100 per cent. of bots (bots pass for over 17 days) ; 100 per cent. of ascarids (worms pass for several days) ; and such stomach worms as are reached.

3. For pregnant mares, do not use above drugs, but use carbon tetrachloride at dose rate of 50 c.c. for animals weighing 1,000 pounds or more. Fast overnight. Can be used without purgation, and at times in pregnancy when purgation is not contra-indicated can be given with dry Epsom salts in same capsules. Is most easily given by stomach tube without salts. Removes 25 per cent. of bots, approximately 100 per cent. of ascarids, 50 to 100 per cent. of cylicostomes, 100 per cent. of blood-sucking strongyles, and such stomach worms as are reached. Build up the blood calcium of an animal with alfalfa, clover or lime in some form for a week before treatment.

B. Supplementary procedures in connection with treatment are as follows :—

1. Don't treat for bots until after adult fly has been killed by frost. After fly disappears, oil all bot eggs on horses with a bland oil, such as linseed, and scrape off eggs with knife or safety razor the following day. Delay treatment for a week or two to allow young bots en route to stomach to reach there.

2. After freezing weather sets in, pastures will be reasonably safe for horses from then on, but larval worms wandering through tissues will return to lumen of digestive

tract and renew infestation there. The treatments recommended above may be repeated in mid-winter or as the condition of the animals and the presence of worm eggs in the manure shows need of renewed treatment.

3. Since spirurid stomach worms breed for the most part in manure, suitable measures for preventing fly breeding are indicated. The old manure pit near one of the stables at Front Royal could be made into an excellent fly trap, as I noted in conversation with Captain Minor. Perhaps adequate measures are already taken at Front Royal.

4. Carry data sheets for each animal covering weight and condition, evidence of worms passed, drugs and amounts, dates, etc. Most of the worm parasites are small and can only be found by careful search in a good light. A sample of manure from each animal should be examined daily for the three days after treatment if possible. It is advisable to wear rubber gloves and pick the manure apart carefully. Any worms collected may be preserved in 5 per cent. formaldehyde and sent to the Zoological Division for identification.

5. The above outline covers procedures through the winter. Next spring the animals and pastures should be in condition to obviate much trouble for some time. However, it would be advisable to put a few animals on a small pasture treated with a copper sulphate spray to ascertain any advantages that might be evident by comparison with other animals not given this additional protection. This procedure has great theoretical possibilities along the lines of actual eradication of worm parasites. The pasture selected should be one that can be sprayed with a minimum amount of trouble, and probably one of the army engineers would be able to devise specially suitable apparatus. If it is desired to undertake this experiment next spring, we will probably be in a position to furnish rather definite information along this line at that time.

6. The results of the winter's developments in connection with the treatments should be published for the benefit of the Army Veterinary Corps and others interested, regardless of the outcome.

Mechanical Power on the Farm.

Tractor and Horse Compared.

Agriculturists from all parts of the country were present at Rothamsted Experimental Station on Tuesday of last week, when Sir Merrik Burrell presided at a conference on "Power for Cultivation and Haulage on the Farm."

Dr. B. A. King, of Rothamsted, who gave the opening paper, said the use of mechanical power for agricultural purposes was rapidly increasing. The returns showed that 56,744 oil or petrol engines were in use in 1925 as compared with 16,284 in 1913. The question of the extent to which mechanical power was likely to replace horses involved financial considerations as well as technical, but there was ample opportunity for reducing the present great difference between the cost of a tractor hour and a horse hour if the problem of using the machine to a greater extent could be solved. There would be a further economy in land work if the tractor were designed to run at an increased speed.

Sir John Russell, Director of Rothamsted, summing up the discussion, said practical farmers emphasised the permanent value of the horse on the farm because of the elasticity of the power it supplied, but mechanical power was welcomed as an adjunct. The most important thing in agriculture was to seize the opportunity to do work when the possibility arose.

The Veterinary Record.

18th February, 1928.

THE CONTROL OF THE DISTRIBUTION OF TUBERCULIN.

It will be in the recollection of some of our readers that a recommendation by the Council of the National Veterinary Medical Association of Great Britain and Ireland that provision should be made for the control of the distribution of Tuberculin and its sale limited, in the interests of stock-owners, to Veterinary Surgeons and Medical Practitioners was submitted to the Ministry of Health and to the Ministry of Agriculture, while other bodies, including the National Farmers' Union and the British Dairy Farmers' Association, were asked to support the Association's representations.

On consideration of the subject at a Conference between representatives of the Royal Agricultural Society and the National Farmers' Union, a decision was arrived at contrary to the proposals made by the N.V.M.A.

In a statement on the results of this Conference made at a meeting of the Council of the Red Poll Cattle Society held subsequently, Sir Merrik Burrell is reported to have said:—

> "Sir John M'Fadyean made an excellent statement on the technical side, and he said the Royal Veterinary College, who were the governing body of the veterinary profession, were not asking for this, and were not in favour of it, They held a different opinion from that of the National Veterinary Medical Association, and Sir John said that the amount of tuberculin not of sufficient potency was very small. It came mostly from two sources which were quite reliable. Although there might be a certain amount of fraud, Sir John told the Conference that he did not think there was a great deal of it, and it was quite easy to detect."

The Association has been in communication with Sir John M'Fadyean in this matter and, as the result, the following letter has been sent to the newspapers which published the above report.

14th February, 1928.

Use of Tuberculin.

Sir,—The attention of this Association has been drawn to a report appearing in your journal with regard to the suggested control of the distribution of Tuberculin, limiting its sale, in the

interests of stock-owners, to Veterinary Surgeons and Medical Practitioners.

In the report Sir John M'Fadyean is reported to have said :—

(Here follows the statement, quoted above, attributed to Sir John).

We would like to draw attention to the facts that Sir John M'Fadyean at the time was not Principal of the Royal Veterinary College, London, and that the Royal Veterinary College is not the Governing Body of the Veterinary Profession.

Moreover, we are authorised by Sir John to state that the remarks attributed to him by Sir Merrik Burrell at a meeting of the Council of the Red Poll Cattle Society, from the report of which the above extract is taken, do not correctly represent his statement on the subject at the Conference between representatives of the Royal Agricultural Society and the National Farmers' Union.

We should be grateful, therefore, if you would kindly give this letter the same publicity as was given the original report.

I am, Sir,

Your obedient Servant,

F. KNIGHT,

General Secretary.

SPRATT'S APPEAL FOR R.V.C. CANINE MEDICINE AND SURGERY PROFESSORSHIP.

We are glad to inform our readers of the public-spirited action taken by the well-known company, Spratt's Patent Ltd., in placing its resources and organisation at the service of the Royal Veterinary College, with a view to raising a fund sufficient to endow in perpetuity a Professorship of Canine Medicine and Surgery and to erect new kennels and alter necessary buildings for a special Canine Department. A minimum capital sum of £20,000 is required for this purpose and is the amount for which the appeal is being made. In an announcement the company state :—" As part of the total need by the Royal Veterinary College of £250,000 for rebuilding, equipment and endowment, the Chairman of Spratt's Patent Limited organises an urgent appeal for a minimum sum of £20,000 to be controlled by the Governors of the College, to provide for the Endowment and Establishment of a Professorship, and the Buildings for a Special Department in the Royal Veterinary College for the Advancement of Canine Medicine and Surgery. Cheques should be made payable to :—" 'The R.V.C. Canine Diseases Appeal,' and addressed to The Chairman, Spratt's Patent Limited, 24-5 Fenchurch Street, London, E.C.3."

It is announced in the *Indian Medical Gazette* for January, 1928, that there will be no medical and veterinary section of the Indian Science Congress in 1928. This is because the recent congress of the Far Eastern Association of Tropical Medicine has absorbed the available papers. The section will be revived at the annual Indian Science Congress in Madras in January, 1929, and those who intend to be present, or to read papers, are invited to communicate with Lieut.-Colonel R. Knowles, I.M.S., at the Calcutta School of Tropical Medicine.

CLINICAL AND CASE REPORTS.

Leucocythæmia in Bovines.

By J. HOWARD JONES, O.B.E., M.R.C.V.S., Bridgend.

In response to the demand for articles describing clinical observations, I beg to record a case of the above as being of possible interest. I do so with apologies for the dearth of scientific detail in my description, but would plead that, apart from my lack of knowledge, the *post-mortem* observations were carried out on a bleak hill side during a violent hailstorm, and with daylight fading.

Subject.—A four-year-old cow.

History.—Had been steadily wasting for about four months : emaciation now pronounced. Appetite good. The first symptoms noticed were that the cow failed to lift and eventually move her tail ; a lump was then seen to grow rapidly in front of shoulder.

Observations.—*Ante-mortem* examination revealed extreme pallor of mucous membranes. The left prescapular lymphatic gland hypertrophied to the size of a large apple. An hypertrophy of the tissue around base of tail. The supramammary and precrural lymphatic glands easily discoverable by their size. Auscultation of chest wall—distinct râles to be heard. Respirations normal in frequency. Pulse : slow, and very weak. Temperature : subnormal.

Post-mortem examination. Every lymphatic gland (and many I had never previously detected) were enormously enlarged. The anterior mediastinal weighed something approaching 3 lbs. and blocked up the whole of the mediastinal space. This gland and some mesenterics were inclined to show a degeneration in their centres. Muscular attachments to the sacrum and coccyx also appeared to be undergoing degeneration, in parts, into tissue much resembling glandular substance.

The following organs : liver, lungs, kidneys, heart, uterus, had maintained their normal appearances—the spleen appeared to be smaller in size than normal—the parietal and visceral pleuræ showed a few growths and attachments resembling those seen in tuberculosis.

The microscopic examination of a spot of blood showed a considerable increase of white blood corpuscles (polynuclear leucocytes).

It would be of considerable interest to be informed, through your columns, of the probable incidence of this condition in animals in this country.

Pulmonary Ingesta-containing Sac in a Bovine.

By H. C. ROCKETT, M.R.C.V.S., Salisbury.

I recently examined a cow under the Tuberculosis Order, and found her down, rather emaciated and with the soft cough typical of tuberculosis, so I condemned her.

On *post-mortem* examination I found that she was tuberculous, but on cutting into the right lung I came upon a quantity of ingesta. I thought at first that it was rather an unusual amount of stomach content that had got into the lung when the cow was slaughtered. Closer examination, however, proved that such was not the case, but that there was a direct communication between the

œsophagus and the lung and the ingesta was in a large sac in the lung, lined by a fibrous membrane. The ingesta in the sac weighed just fourteen pounds, and had the appearance of normal stomach contents, so I presume that it was regurgitated and cudded in the ordinary way.

The trachea was normal, also the bronchi of the left lung. Those of the right lung did not have any opening into the sac, as might be expected, otherwise, no doubt, septic pneumonia would have set in.

REVIEW.

[Poisonous Plants on the Farm. By H. C. Long, B.Sc. (Miscellaneous Publications, No. 57, Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1.). Price, 2s. net; quarter bound, 2s. 6d.; cloth, 3s. All post free.]

The question as to the extent to which plants on farms in this country are poisonous was regarded as so important that the Ministry of Agriculture and Fisheries commissioned one of its officers, Mr. H. C. Long (the author of the standard English work, "Plants Poisonous to Live Stock"), to prepare this volume. An account is given of plants which may be the cause of losses amongst stock; there are also useful notes on minor and suspected species, plants which taint the milk of cows, and plants which cause mechanical injury. The book is evidently intended primarily to provide intelligent farmers with some knowledge of the poisonous qualities of some plants which may be eaten by their animals. Symptoms of poisoning by the various plants are not generally given, but as the work contains fifty-one illustrations, veterinary surgeons are recommended to spend half-a-crown in procuring a copy of this very useful book.

The subject of plant poisoning in this country is the most difficult and the least satisfactory branch of toxicology. Our present knowledge is mainly based, not on experimental research, but on the records of accidental cases. The variations in toxicity with season and locality and the variations in the susceptibility of species are factors to which little attention has hitherto been directed. Moreover, we are at the present time quite ignorant of the causes to which are due the fatal effects of animals consuming portions of certain plants. This unsatisfactory state of knowledge is exemplified by the inclusion of a list of thirty plants "*suspected* of having harmful properties" in Mr. Long's book, while even in other sections we find such statements as "little is known with certainty about the effects," "the poisonous principle would appear to be uncertain."

The book is written in a clear style, but the author's enthusiasm for literary research amongst ancient writers sometimes leads to a want of balance and proportion. For example, two pages are devoted to a description of darnel, with quotations from Ovid, Shakespeare and Anne Pratt, but less than a page is occupied by an account of ragwort, and no mention is made of the observations of Stockman and other English veterinarians on the poisonous properties of this weed.

(Continued at foot of next column.)

REPORT.

[Nyasaland Protectorate. Annual Report of the Department of Agriculture for 1926, pp. 28. Published by the Government Printer at Zomba.]

This is an interesting, if in some respects a rather depressing, summary of the working of the various technical departments subordinated to the Director of Agriculture, comprising the Reports of the Agricultural Chemist, of the Entomologist, and of the Chief Veterinary Officer, in that order.

It is perhaps inevitable that the report of the Chief Veterinary Officer should be not only the last, but in extent by far the least, of these documents. Technically we are not much concerned with any but the veterinary report, but it is desirable for a proper understanding of all the pastoral circumstances of a country, to have a general acquaintance with the various local agricultural problems.

The following table, reproduced from the report, shows the principal crops and their variations from 1916 to 1926:

	1916	1925	1926
Coffee	1,460	875	1,323
Cotton	27,342	17,541	13,358
Fibres	801	4,813	6,212
Rubber	6,120	1,203	1,365
Tea	4,228	5,435	5,788
Tobacco	9,386	22,415	22,908
Miscellaneous ...	3,546	11,073	16,211
Total ...	52,883	63,355	67,165

The outstanding features of this table appear to be the increase in sisal hemp and the falling off in cotton.

The Director of Agriculture in his introduction to the several technical reports, makes some interested and interesting references to the work of the Agricultural Chemist and the Entomologist, as well as to his own activities. His only reference to the Veterinary Report is contained in the following sentence: "The work of the Veterinary and Forestry Divisions has been reported on in detail by the Acting Chief Veterinary Officer and the Acting Chief Forestry Officer and calls for no special comment on my part. The Veterinary Report is attached as Annexure V."

It is in no thin-skinned or petulant spirit that I thus point out where the Veterinary Section of the Department of Agriculture appears to rank in the estimation of its chief: appearances of this sort may be misleading and it may be true that in the special circumstances of Nyasaland questions affecting live stock are of relatively negligible importance: it may even be that the Director of Agriculture has so much confidence in his veterinary officers and is so convinced of their technical excellence that he will not presume to comment in any way upon their

(Continued from previous column.)

The volume is well printed and illustrated; the author and publishers are to be congratulated on producing a useful, practical guide to the study of poisonous plants.

G. W. Clough.

work, but thinks that the safest and the best thing to do is to let their report speak for itself. The explanation is perhaps contained in one of these alternatives; if, as one would prefer to suppose, the explanation may be found in the latter alternative, the inference obviously is that the Veterinary Service should be a separate Department, as it is on the Gold Coast.

It is, at any rate, a noteworthy thing that when one finds the veterinary branch tagged on to the Department of Agriculture, one is also apt to find, as in this instance, a report and a progress of less value and of less consequence than when it is functioning as an independant Department.

That is a fact which any one who runs may read.

The Veterinary Report is signed by Mr. J. de Meza, Acting Chief Veterinary Officer, and is contained in 2½ pages. There are no statistical tables and no figures to indicate, however roughly, the extent of the prevailing contagious diseases.

The European veterinary staff in 1926 comprised a chief veterinary officer (Mr. J. A. Griffiths), a veterinary bacteriologist (Mr. J. de Meza) and two veterinary officers, also a lay stock inspector. The African personnel comprised twenty-eight native veterinary field assistants, one native clerk, eight policemen and thirty-five dipping tank labourers.

"The distribution of the European staff was . . . . the chief veterinary officer at Zomba; an officer . . . . at Blantyre; an officer . . . . at Dowa; and the stock inspector at Karonga in charge of the precautions against rinderpest in the North Nyasa district."

Under the heading "Control Measures," we read that: "Practically all European-owned cattle are now dipped. During the year the Government constructed two further dipping tanks in the Central Province at Fort Mlangeni and Danbole. These tanks are now working and form additional links in the chain of tanks from the Central to the Southern Province, lessening the danger of introducing such diseases as East Coast fever, etc."

The numbers dipped during 1926 were: "Cattle, 196,550; sheep and goats, 6,886. These figures show an increase over the year 1925 as follows: cattle, 44,666; sheep and goats, 1,700."

One might have thought that this notable progress deserved some comment from the Director of Agriculture in his opening remarks.

"The consumption of meat by natives, more especially, of course, by educated natives, is increasing rapidly . . . . It is noticeable that the supply of cattle for the native market falls below the demand, especially during times when for any reason permits to import animals from the Central Province are withheld. Formerly the native butchers were content to wait until cattle were brought to Blantyre for sale. At the present time should any shortage occur they at once proceed to outlying districts to purchase. The trade must be regarded as flourishing."

Mr. de Meza may be congratulated upon these observations. It does not require much imagination to realise that with the progressive civilisation and industrialisation of Central Africa, meat-eating by the native population will proportionately increase, so that cattle production and meat production will steadily grow in extent and importance until the economic limit is reached. "The demand for working cattle by European planters in the Shire Highlands becomes larger every year . . . . Unfortunately East Coast fever must now be regarded as enzootic in the greater part of the province (Central), and it is often impossible to issue permits for the export of cattle for any other purpose except slaughter. However, the number of dipping tanks is being steadily increased year by year. Several areas now exist in which all cattle are dipped regularly. These areas should and will gradually expand until the whole province is under systematic dipping. *It will then be possible to stamp out East Coast fever and other tick-borne diseases.*" (Reviewer's italics.)

Could any intelligent person reading and pondering these passages fail to appreciate that the men undertaking this highly technical and important work should be allowed, nay, should be compelled, to run their own show?

Unfortunately it is one thing to appreciate an enterprise and another thing to overcome the *vis inertia* of officialdom: "The work of the Veterinary Division," says the Director of Agriculture, "calls for no special comment from me."

Contagious diseases of cattle included rinderpest, trypanosomiasis, East Coast fever, redwater fever, chronic anæmia (*T. mutans*), anaplasmosis, anthrax, blackquarter, seasonal gastro-enteritis ("grass sickness"), follicular mange, tuberculosis, distoma hepatica.

Of rinderpest it is stated that: "There has been no outbreak of this disease during the year. At Mbozi, in Tanganyika territory, twenty-five miles from our northern border an outbreak occurred during January . . . . . Special camps have been built. These are placed in central positions and are permanent. In these camps is stored the supply of anti-rinderpest serum and apparatus necessary for inoculating large numbers of animals."

Trypanosomiasis "still gives rise to grave apprehension. The areas under tsetse continue to spread and the number of deaths to increase . . . . Treatment by means of intravenous injections of tartar emetic is still being persevered with, and fairly satisfactory results obtained, *but it is as well to emphasise the fact that injections of tartar emetic do not constitute a cure, and animals, which have to all appearances recovered, very often relapse with rapidly fatal results should unfavourable conditions occur.* Good feeding and rest during the injections are essential." (Compare the Reviewer's italicised lines with Hornby's article in *Veterinary Record* for January 21st.) East Coast fever "in the Northern Province is enzootic," as it is in the Central Province.

"No diseases of sheep and goats have been reported during the year.

"There has been no outbreak of swine fever during the year.

"Outbreaks of fowl cholera have been severe . . . . Bacterial diarrhœa (of fowls) . . . . . has been present."

Among dogs piroplasmosis "continues to be of most frequent occurrence. It would seem to be the case that practically every dog contracts the malady.

"Few animals die if treated in good time."

Rabies "has occurred with greater frequency than in former years and the number of cases reported gives rise to anxiety."

I have now summarised nearly the whole of Mr. de Meza's interesting and concise report: it cannot have been easy for him to describe the important events of a year, as experienced by a technical department of respectable proportions in a country the size of Nyasaland, within about 2,000 words of text—the Government Entomologist took nearly as much space to discuss a few of the pests affecting the coffee plant. Moreover, nothing from a veterinary source appears in the List of Publications, 1922-1926, contained in Annexure IV. of the Report, which gives the titles of about thirty articles contributed by the Agricultural Chemist, the Government Entomologist and other members of the Agricultural staff.

Whatever may the position of the veterinary service in a country, it surely ought from time to time to find expression in the local publication of scientific studies, however simple or brief they may be. Otherwise the veterinary branch of the Government must inevitably be compared with other more vocal branches to its disadvantage, thereby increasing the likelihood of its remaining a hewer of wood and a drawer of water. There may, however, be some important reason why the veterinary officers in Nyasaland never participate in the compilation of technical circulars or bulletins published under the *aegis* of the Director of Agriculture, and, if so, it would be interesting to know what that reason is. J. W. R.

Victoria Veterinary Benevolent Fund.

Meeting of Council.

A meeting of the Council of the Fund was held at 10 Red Lion Square, London, W.C.1., on Thursday, January 12th, 1928, when there were present, Lieut.-Col. J. W. Brittlebank (President) in the Chair, Professor J. B. Buxton, Mr. A. Gofton, Mr. J. W. McIntosh, Major-General Sir John Moore, Lieut.-Col. P. J. Simpson, Mr. S. H. Slocock, Mr. H. Sumner, Captain S. Villar, Mr. E. Alfred West, Mr. J. Willett and Professor G. H. Wooldridge.

The *minutes* of the previous meeting, having been published, were taken as read and signed as correct.

Letters of apology for absence were received from Messrs. C. W. Townsend F. L. Gooch H. P. Standley, and W. Jackson Young.

Correspondence.—(a) A letter was received from the executors of the late R. C. Trigger, transmitting the sum of £150 in respect of the legacy left by Mr. Trigger to the Fund.

(b) A letter was received from Mr. R. Marking, asking the Council's acceptance of an annual subscription of £10 10s. to the Fund and the Secretary was instructed to accept the offer with gratitude.

Secretary's Report.

The Secretary submitted the following report:—

Since the last quarterly meeting the following donations and new subscription have been received:—

	Donations. £ s. d.	*Subscription.* £ s. d.
J. A. W. Dollar	1 1 0	
Central V.M.S.	1 14 9	
Royal Counties' V.M.S. ...	3 16 9	
Exors. of R. C. Trigger ...	150 0 0	
Major C. W. Townsend (Life Membership)	10 10 0	
Major E. C. Russell	1 0 0	
W. W. Smart	1 1 0	
Capt. Ross Grant	1 1 0	
N. Dobson	0 10 6	
Wm. Pauer	3 3 0	
Mark Tailby (Life Membership)	10 10 0	
A. J. Beeson	1 0 0	
G. V. Slinn (Collecting Box) ...	25 11 0	
Major Brennan De Vine ,, ...	1 17 0	
W. Jackson Young ,, ...	1 11 3	
A. Whicher ,, ...	3 18 11	
E. Alfred West ,, ...	0 5 0	
Capt. W. Shipley ,, ...	0 5 0	
J. L. Cormack ,, ...	3 10 0	
J. R. Baxter ,, ...	0 9 0	
J. H. Thomson ,, ...	1 1 0	
J. W. Conchie ,, ...	0 8 3	
S. H. Slocock ,, ...	1 0 0	
Capt. H. Gillmor ,, ...	1 11 6	
F. L. Gooch ... ,, ...	0 5 3	
A. M. Munro ... ,, ...	4 0 0	
	£231 1 2	
N. Dobson		0 10 6

Life Membership.

It was unanimously resolved that Mr. Mark Tailby and Major C. W. Townsend be elected Life Members of the Fund.

Cases.

No. 11, Widow, aged 67, invalid, lives with married daughter. The grant of 10s. a week was continued for the present quarter.

No. 68, Widow, in reduced circumstances and ill. The special grant of £2 per month made last quarter was renewed for the present quarter.

No. 90, Widow, aged 26; two children under 6. Earning £1 a week. The grant of 15s. a week was continued for the present quarter.

No. 91, Daughter of late member, ill. The action of the executive in making a special grant of £3 was approved.

No. 100, Member, aged 69. It was reported that this member, who had been recently in receipt of 10s. a week, died in December.

No. 105, Widow, aged 45, 4 children, two now in orphanage. The grant of £1 a week was continued.

No. 108, Widow, two sons. Application for assistance towards education. It was resolved that a grant of 10s. a week be made during the present quarter.

No. 109, Widow, aged 39, three children, two at work, one at school. The grant of £1 a week was renewed for the present quarter.

No. 110, Widow, lives with unmarried sisters, three children, of whom one at school. Application for assistance towards education. It was resolved that, in view of the number of more urgent cases, no grant be made.

(Continued at foot of second column next page.)

DIVISIONAL REPORT.

Central Division.

MEETING AT CAMDEN TOWN.

The Central Division met in the New Lecture Theatre, at the Royal Veterinary College, on Thursday, January 14th, the use of the epidiascope at the College being an essential feature of the proceedings, and necessitating a departure from Red Lion Square.

Fellows, visitors and many students attended at the personal invitation of Principal F. T. G. Hobday, who made the evening a memorable one by giving an address on "The Veterinary Colleges of the World—A Comparison," and placing before the meeting, in illustration, an extraordinarily comprehensive series of screen views of the veterinary institutions of the Continent, of America, and of the Dominions. Adroitly inserted between illustrations of some of the extravagantly magnificent Continental schools was a telling series revealing, with almost ludicrous effect, the structural shortcomings of the London College. The exhibition of such a contrast between impressiveness abroad and dilapidation at home would appear to provide an unsurpassable means of impressing upon the profession and the public the urgency of a prompt and generous response to the College Re-building Fund.

Principal Hobday's paper, and the observations of those who followed him, were reproduced at the commencement of last week's issue of the *Record*.

The President (Capt. W. K. Townson) occupied the Chair, and there were also present Capt. L. S. Balls, Messrs. W. Brown, H. E. Bywater, E. L. Clarke, R. L. Cornell, Major T. Dalling, Capt. T. M. Doyle, Messrs. R. Eglesham, A. Fowler, J. A. Galloway, H. Gray, W. S. Gordon, Dr. Tom Hare, Principal F. T. G. Hobday, Major Adam Hodgins, Major H. Kirk, Major-Gen. Sir John Moore, Professor J. Macqueen, Professor J. McCunn, Mr. J. H. Mason, Col. W. A. Pallin, Messrs. H. J. Parkin, W. Perryman, R. A. Philp, H. L. Roberts, James Rowe, Dr. A. L. Sheather, Mr. C. H. Sheather, Major P. W. Dayer Smith, Prof. A. R. Smythe, Messrs. A. W. Stableforth, F. H. Stainton, J. Stephens, Capt. R. J. Stow, Capt. P. R. Thompson, Capt. W. Watt, Messrs. A. C. Wild, F. W. Willett, Professor G. H. Wooldridge, and J. F. Macdonald (Hon. Secretary).

Visitors.—Mrs. Tom Hare, Messrs. S. E. B. Balfour-Jones, A. E. Bayley, J. L. Buckingham, A. Ward Butcher, J. J. Davies, N. Dobson, W. Downing, S. J. Edwards, S. W. Fitt, L. Gabriel, Professor S. H. Gaiger, Messrs. V. A. Greig, J. H. N. Hobday, A. A. Mackay, R. W. O'Brien, V. E. Pratt, R. A. Willett, and T. C. Wight.

The minutes of the previous meeting of the Division, having been published in the *Record*, were taken as read and were confirmed.

Correspondence.—(1) The receipt was announced of apologies for absence from Messrs. H. Bell, J. C. Coleman, Major G. Rees-Mogg, Mr. E. L. Stroud, Major R. F. Wall, Capt. S. J. Motton and Capt. T. L. Wright.

The meeting was concerned to learn that Major Wall had sustained a nasty accident, having been knocked down by a taxicab, and was relieved when the Hon. Secretary added that Major Wall was now getting about again.

(2) Letters of acknowledgement of communications sent from the Central, from the Secretary of the "National" and the Secretary of the R.C.V.S.

(3) From Sir Walter Gilbey, Chairman of the National Horse Association of Great Britain, inviting the Division to nominate a delegate to attend a conference of all Societies interested in horse transport, with a view to considering practical suggestions to be submitted to the Minister of Transport in respect of the present dangerous condition of many roads, and to recommend the universal use of whatever surface may be found to be the most satisfactory for all purposes.

The meeting concurred in the view expressed by the HON. SECRETARY that the Division should be represented, and that they could not do better than reappoint the gentlemen who had already represented them in connection with the activities of the National Horse Association: Mr. J. W. McIntosh and Mr. W. Perryman.

Obituary.—The PRESIDENT: I have two announcements to make which you will be very sorry to hear. The first is of the death of one of our old and respected members, Mr. Garry. I think the Secretary has already sent a message of sympathy to the bereaved from this Society.

I have also, with the deepest regret, to inform you that another valued member of this Society, Mr. Wallis, of Barnet, passed away last nkght.

The meeting stood in silence in tribute to the memory of these Fellows of the Society.

Nominations.—The following gentlemen were nominated for membership: Messrs. V. P. Jones (Guildford), K. Ollerhead (Kensington), and W. Downing (London).

Election to Membership.—Election *en bloc* was made of the following: Lt.-Col. W. S. Anthony (Aldershot), Major Frank Chambers (Wolverhampton), Major Adam Hodgins (Aldershot), Capt. R. B. Palmer (Warwick), Lt.-Col. W. E. Parkes (Wellingborough), Dr. A. Leslie Sheather (Regent's Park), Mr. A. W. Stableforth (Royal Veterinary College), Capt. P. R. Thompson (Oundle), Capt. W. Watt (Weybridge), and Major J. Scott-Bowden (Colwall).

(*Continued from previous page.*)

No. 111, Widow, aged 52, no present income. In reduced circumstances. A grant of 10s. a week was made for the present quarter.

No. 112, Member, aged 68, earns £1 a week. Lives with married daughter. In debt to landlord. It was resolved that, in view of the number of more urgent cases, no grant be made.

No. 113, Member, aged 26, unemployed in London and without means. The action of the Executive in making a special grant of £2 10s. to cover railway fare back home was approved.

No. 114, Member, aged 67. Both member and wife ill. Able to earn very little. It was resolved that a grant of 10s. a week be made during the present quarter.

XUM

Mr. JAMES ROWE took the opportunity, while the ballot box was circulating, to give the meeting some reminiscences of his connection with the College, saying that his father graduated there in 1842 and put him into the College at 17, in the year 1865, and he (Mr. Rowe), qualified 60 years ago this May. (Applause.) He was pleased to say that he had been able to attend nearly every October inaugural meeting of the College year. He had asked permission to make those remarks because it occurred to him that it might be an interesting query to all of those present to ask themselves whether they, or how many of them, would live to enter their *alma mater* after the lapse of 50 years, and remember what he could after 60 years. (Applause.)

The PRESIDENT: I am sure we are all very pleased to see Mr. Rowe with us to-night and in such excellent form, (hear, hear)—and on behalf of this Society I take this opportunity of wishing him a very happy New Year, and to express the hope that he will be able to meet with us for many years to come. (Applause.)

Morbid Specimens.—Continuing, the PRESIDENT said: As there are several interesting morbid specimens kindly arrayed by Dr. Hare, we have them on view in the adjoining room, and I propose that we examine them at the close of the meeting, returning here for purposes of discussion.

Dr. TOM HARE said that he hardly thought the latter to be necessary, but he would be very pleased to discuss the specimens with Fellows as they were viewing them.

The following specimens were exhibited:—

1. The skull and inferior maxilla of a pig affected with osteomalacia.

2. Bilateral hydronephrosis of a 12 weeks' old pig.

3. The heart of a cow showing metastases of a primary lymphosarcoma of the mediastinum.

4. Small intestine of a pig showing a large diverticulum.

5. The carcase of a terrier showing a large lipoma, weighing 500 grammes, situated at the base of the neck, and arising from the deep fascia of the left side of the neck.

Mr. HENRY GRAY gave a demonstration of syphilis in rabbits. He illustrated his demonstration with three affected rabbits, which he has handed over to the Department of Pathology for further investigation.

The remainder of the evening was devoted to Principal Hobday's illustrated address, and to an inspection of the Royal Veterinary College under the guidance of members of the staff.

At the conclusion of the discussion on the address, the PRESIDENT said: I am sure that Professor Hobday has spared neither time nor trouble in preparing this excellent address, and I ask you to accord him a most hearty vote of thanks.

All responded warmly, and with the vote was associated the name of Mr. Mackay for the great help he had been in working the epidiascope and in preparing the subjects for demonstration.

Mr. Gray and Dr. Hare were also thanked for their part in the proceedings.

J. F. MACDONALD,
Hon. Secretary.

NOTES AND NEWS.

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events.

Feb. 20th—Meeting of the Editorial Committee, N.V.M.A., 4-30 p.m.
Feb. 24th—Annual Dinner and Meeting of the Midland Counties Division at Grand Hotel, Birmingham, at 6-30 p.m.
Feb. 25th—Annual Meeting of the North of England Division at Newcastle-on-Tyne.
Feb. 29th—Annual Meeting of the South Eastern Division at Tunbridge Wells.

SHEEP SCAB ORDER OF 1928.

The Ministry of Agriculture and Fisheries issued on February 10th, 1928, Diseases of Animals Branch Circular Letter No. 90 in reference to the above Order which will come into force on April 1st next and which is of particular interest to Veterinary Inspectors of Local Authorities.

Accompanying this letter is a Memorandum which summarises the main provisions of the new Order and the procedure thereunder. This Memorandum also indicates the principal alterations effected by the new Order and it has for convenience been printed separately and with this letter placed on sale by H.M. Stationery Office, as it is thought that Local Authorities may find it useful as a guide for their officers in dealing with matters arising under the Order. It should, however, be read in conjunction with the Order itself.

The particular attention of Local Authorities is called to the following matters:—

1. Removal of affected sheep by float.
2. Sheep-owner's right of appeal to Minister as to existence of Sheep Scab.
3. Directions to be given by Veterinary Inspector as to treatment of diseased sheep.
4. Contact sheep.
5. Movement out of a Movement Area of undipped fat sheep intended for immediate slaughter.
6. Veterinary Inspector's form of Report.
7. Preliminary and Final Reports by Inspector of Local Authority.
8. Alteration of Forms specified in First Schedule to the Order.

Copies of the Circular letter and the Memorandum may be obtained direct from H.M. Stationery Offices, or through any Bookseller, price 2½d. each, post free.

NATIONAL PONY SOCIETY.

The above Society will hold its Annual Show, at which it is estimated that there will be some 250 Polo, Arab and Mountain and Moorland ponies exhibited, at the Royal Agricultural Hall, Islington, London, N, on March 2nd and 3rd, 1928.

The Band of H.M. Coldstream Guards will play on each afternoon of the Show, and there will be interesting and attractive Competitions, under saddle, for both Ladies and Gentlemen.

CONGRESS ACCOMMODATION.

We are asked to draw the attention of those who anticipate attending the Newcastle Congress of the Association, that at Easton Hall, a hostel used in connection with Armstrong College, there is accommodation for forty single gentlemen. Particulars were published in last week's issue.

London College's Rugby Triumph in Dublin.

"The annual encounter between Dublin Veterinary College and London Veterinary College, played last week on the Beetive Ground, Donnybrook, resulted in a meritorious victory for the London Veterinary Students by one goal and two tries (11 points) to nil," says a Dublin paper. "The visitors fully deserved their success, their chief superiority lying with their backs, who frequently indulged in clever rounds of passing. Forward there was little between the sides, and in the loose the Dublin students more than held their own. It was a hard fought and interesting game, and from the amount of pressure the Dublin side put up in the early stages of the second half they at least deserved a score.

"Clarke, at full back for the winners, played a good, sound game. Peele and Hobday were the best of a smart three-quarter line. Both Ince and Filgate did good work at half, and amongst the forwards none were better than Messervy, Reid and Sadler.

"On the Dublin side Smyth, Phillips, Griffin, Harris, O'Brien (backs), and Pennefather, Begley and Healy (forwards) were the pick.

"London got their first score midway through the first half, when from a round of passing Hobday crossed, the kick at goal failing.

"In the early stages of the second half Dublin pressed hard, and the London Students had a very anxious time defending.

"They managed to keep their line intact, however, and before the end a sustained attack by the visitors culminated in Peele crossing twice in quick succession, both scores coming from rounds of passing. Harvey added the extra points to the first score."

Dublin Veterinary College.—J. Smyth; N. Phillips, Lambert, R. Griffen, J. Lowndes; A. P. Harris (scrum), H. V. O'Brien (out); J. Furney, J. Caffery, R. K. Pennefather, P. M'Geady, J. Campbell, P. Begley, M. Hynes, M. Healy.

London Veterinary College.—M. H. Clark; J. G. Harvey, A. D. Owen, J. D. Peele, J. H. Hobday; W. B. Ince, T. A. Filgate; J. A. Nicholson, P. Norrington, K. H. Everett, H. J. Sadler, J. Reid, W. Pease, A. Messervy, B. G. Catmur.

Result:—
London Veterinary College.—1 goal, 2 tries (11 pts.).
Dublin Veterinary College.—Nil.

Personal.

Appointment.—Mr. Sydney G. Abbott, M.R.C.V.S., D.V.S.M., has recently been appointed chief veterinary inspector to the county of Renfrew, to operate the Tuberculosis Order, 1925, and the Milk and Dairies Act.

Mr. Abbott was a student at the Glasgow Veterinary College, where he graduated M.R.C.V.S. with honours. He subsequently passed the D.V.S.M. examination at Edinburgh, obtaining the highest marks in his year. He was then appointed professor of pathology at the Glasgow Veterinary College, and held that position for a year, leaving to go to Sheffield as assistant veterinary inspector to the Corporation.

In September, 1927, he was appointed chief veterinary officer for the county of West Lothian.

. . . . . .

Will.—Hutchins, Mr Emanuel, M.R.C.V.S., of Bonchester House, Bonchester Bridge, Hawick, Roxburgh, late C.V.O., Uganda (net personalty £3,296), £3,439.

. . . . . .

Birth.—Nicholson. At Morpeth, on January 8th, the wife of C. Nicholson, M.R.C.V.S., a daughter.

Obituary.

Simson.—On February 1st, at Pond Farm, Langham, William Simson, aged 79. Existing practitioner.

. . . . . .

The late Mr. F. T. Prince.

The Hon. Secretary of the Derbyshire Division N.V.M.A. writes, in reference to the late Mr. F. T. Prince, of Ashbourne, whose death was announced in last week's issue of the *Record*:—"The late Mr. Prince was held in high esteem by members of the Derbyshire Veterinary Association, he being one of the original members and their first Honorary Secretary. He also acted as President in 1925."

The Ashbourne News of 2nd February stated:—"Mr. Prince was the fourth son of the late Mr. William Prince, the former proprietor of the Izaak Walton Hotel, Dovedale, and he became a partner with the late Mr. T. H. L. Duckworth on his qualification as a veterinary surgeon. The firm of Duckworth and Prince was very well known, and Mr. Prince was highly esteemed both in and beyond the confines of the Ashbourne district, being known all over the country. He was a prominent Freemason, being a member of St. Oswald's Lodge, and was also on the committee of the Ashbourne Farmers' Ball, this function being postponed owing to his death."

The following members of the profession were present at the interment:—Messrs. Barlow, Wilson, Jameson, G. Howe (Buxton), E. Marrison (Bakewell), Levie (Derby), De Ville (Uttoxeter), Capt. O. V. Gunning (Tutbury), and Carter (Cheadle), while amongst the many beautiful floral tributes was a wreath bearing the inscription:—"With deep regret and sincere sympathy from the members of the Derbyshire Veterinary Association."

CORRESPONDENCE.

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

All correspondence must bear the name and address of the contributor for publication.

The Editor does not hold himself responsible for the opinions of his correspondents.

Progress of the Royal Veterinary College Rebuilding Fund.

To the Editor of The Veterinary Record.

Sir,—I find that in my reply to the discussion on my paper published in your last issue, I have given a slightly false impression as to the actual amount which we still have to find, as, in making the statement that "surely we have in Great Britain, out of a population of 48 millions, 250,000 sporting people who would give us £1 apiece, if only we could find them," I said that "we have reduced that number whom we have to find to 150,000." I ought to have made this number 200,000.

There is also a printer's error in the amount which the generous act of Messrs. Spillers and Co., in organising the Crystal Palace Championship Dog Show, raised for us, as it states in last week's *Record* that it "added £1,400 to our fund." Somehow the figures got transposed, as the amount should have been (including the Government grant), £4,100.

During the past week we have had some still further encouragement in that Messrs. Spratts Patent, Ltd., have undertaken to collect on our behalf a minimum sum of £20,000 for the purpose of founding and endowing a Chair, in the College, of Canine Medicine and Surgery. Further particulars of this will be found, I understand, elsewhere in

this number.—Yours faithfully, FREDERICK HOBDAY, *Principal.*
Royal Veterinary College,
Camden Town, London, N.W.1.
February 14th, 1928.

The Abortoscope Method of Applying the Agglutination Test.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—I have just received, by last mail, Mr. Tutt's reply to my letter, published in your issue of December 10th, 1927.

In his letter of October 1st, he stated that the Abortoscope "*test was wrong* in detecting six as reactors." I regret that I overlooked the fact that in his summary he admits "that the six which did not abort, *were infected*." It would therefore appear that, after all, the Abortoscope test was right.

Mr. Tutt now says "What I consider was the most unsatisfactory result of the test was the fact that it failed to detect eight cows which did abort after the test. As the result of this, other cows, that were not infected at the time, have since become infected and aborted through contact with these eight which were not isolated in view of the test results."

This would appear to imply that the Abortoscope test was inaccurate and failed to reveal the fact that at the time of the test certain animals were actually infected, and that as a result it was responsible for the spread of the disease to clean animals. I trust that I am again misunderstanding Mr. Tutt and that such an inference is not intended.

Unfortunately, the full facts of the case are not recorded. For example, we are not told whether the non-reactors were immediately removed from the farm or premises which must have been heavily infected, or whether, after removal, all risk of infection from the old or any other source, was eliminated, and so on. In such circumstances the Abortoscope may have been right and the cows may not have become infected until after the test.

Or again, one or more of the animals may have been in the early stages of the infection before any or not sufficient agglutinins were present in the blood to yield a positive reaction by any method of applying the agglutination test.

As I have repeatedly pointed out, the Abortoscope is merely the simple application of the agglutination test which itself has its limitations. But knowing the sensitiveness of the emulsion it contains and the exact tests to which each consignment is submitted before issue, I cannot believe that it could return as negative eight animals which were actively infected with specific abortion at the time of the test.

May I suggest that in the cases under discussion, when it was realised that one or more of those animals previously negative had aborted, the application of the test to them and to the animals in contact with them, might have yielded valuable information enabling the spread of the disease to be arrested?

Apologising for occupying so much of your valuable space.—I am Sir, yours faithfully, LL. E. W. BEVAN, M.R.C.V.S.
Salisbury, Southern Rhodesia, South Africa.
23rd January, 1928.

Trypan Blue in the Treatment of Bovine Redwater.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—After an extensive experience I beg to support Mr. Bevan's remarks *re* the efficiency of trypan blue in the treatment of bovine redwater as seen in South Africa.

It is a specific if given in full doses and the sample is good.

Personally, I use from 100 cc. to 200 cc. of a saturated solution intravenously and have seen many cases almost *in extremis* with a heavy blood infestation, apparently almost normal twenty-four hours after inoculation with a negative blood examination.

An important point is the efficiency of the sample of the drug and this has not been made sufficiently public. Since the late war I have met with trypan blue which is not only useless, but which has produced serious and even fatal effects. Immediately after inoculation extreme dyspnœa is in evidence and heart failure only assisted by volatile stimulants; whilst on the same farm and at the same time animals have been injected similarly with pre-war trypan blue with no subsequent discomfort and make excellent recoveries.

I have experienced this with samples from the best continental firms, which samples have been returned to Germany for the maker's edification and they have not been able to explain the position.

This is one point which needs investigation and vigilance on the part of the practitioner.

Further, to get good smears, use the fresh tiny drop of blood obtained from a small incision in the ear; the parasites are most frequent in the surface circulation and may be missed otherwise.—R. PAINE, F.R.C.V.S., Government Veterinary Officer.
Grahamstown, Cape Province,
24th January, 1928.

The "Record" Found Them.

TO THE EDITOR OF THE VETERINARY RECORD.

Sir,—It may interest you, as it shows the value of an advertisement in the *Record*, that I have obtained all the books I advertised for in it, although booksellers in London and the provinces have been searching for these books for me for months, and advertised in the book journals, and all in vain.—Yours faithfully, J. F. D. TUTT.
1 St. Cross Road, Winchester.
13th February, 1928.

The Editor acknowledges the receipt of the following:—
Communications from Captains D. Campbell, J. Stow Young. Majors A. C. Duncan, J. G. E. Gallie, Messrs. H. Gray, T. F. Hogben, K. F. Quin, and Professor J. H. Lloyd.

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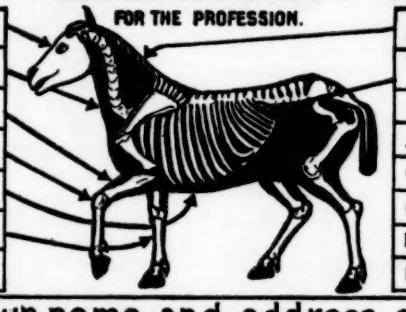

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